

**REMARKS**

In accordance with the foregoing, the specification has been amended to improve form and provide improved correlation with the drawings and claims. Claims 1, 9, 19, 23, 25, 30, 33, and 36-38 have been amended, and claims 1-39 are pending and under consideration. No new matter is presented in this Amendment.

**SPECIFICATION:**

The Examiner objected to paragraphs 24 and 25 of the specification because the paragraphs were not consistent with the figures to which they referred. Paragraphs 24 and 25 have been amended to be consistent with Figures 1B and 2B. The applicant respectfully requests withdrawal of the objection.

**REJECTIONS UNDER 35 U.S.C. §101:**

Claims 30-34 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. The Examiner argues that the possibility of the computer readable medium being a carrier wave renders the subject matter of the claims non-statutory. The specification has been amended so that the computer-readable recording medium reflects statutory subject matter. Withdrawal of the rejection is therefore respectfully requested.

**REJECTIONS UNDER 35 U.S.C. §112:**

Claims 1-39 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. The applicant respectfully traverses.

The Examiner's grounds for rejection were that discs with an outer radius of 22.5 millimeters, such as those disclosed in the specification, were not known in the prior art. The prior art, according to the Examiner, disclosed standard or mini optical discs, both with an outer circumference radius significantly larger than 22.5 mm. However, discs with an optical radius within the ranges disclosed in the specification were known in the art at the time the invention was made. For example, Fox, "Tiny optical disc could store five movies", discloses an optical disc with a diameter of 3 centimeters (see Fox, paragraph 5, in accompanying IDS). An optical

disc with a diameter of 3 centimeters would have an outer circumference with a radius of 1.5 centimeters, or 15 millimeters. A disc with an outermost radius of 15 millimeters is well within the ranges disclosed in the specification. The discs disclosed in the specification were known in the art at the time the invention was made and no undue experimentation would have been required. Therefore, the specification and the claims were enabling at the time the invention was made. Accordingly, the applicant respectfully requests that Examiner withdraw the rejections under 35 U.S.C. § 112, first paragraph.

Claims 23 is rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner rejected claim 23 on the grounds that the two values recited in the claim were identical. Claim 23 has been amended so that the two values differ. Support for this amendment can be found in the specification, for example in paragraph 33. Withdrawal of the rejection is respectfully requested.

Claims 36-39 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 36 and 37 have been amended to bring the preamble of the claims into line with the steps recited in the body of the claim. Claim 38 has been amended to bring the preamble of the claim into line with the elements recited in the body of the claim. Withdrawal of the rejection is respectfully requested.

#### **REJECTIONS UNDER 35 U.S.C. §102:**

Claims 1-3, 5, 9-11, 13-16, 19-21, 24-27 and 29-39 are rejected under 35 U.S.C. §102(b) as being anticipated by Kahlman et al. (U.S. Patent 6,496,541).

Kahlman discloses a method of inserting a sync signal into a data stream (col. 14, lines 16-50.) The sync signal has a unique pattern (col. 14, lines 25 -26.) In addition, the sync signal has a 3-bit code word immediately before and after the unique pattern (col. 14, lines 25-32.) The length of these code words is fixed at 3 bits.

In contrast, claim 1 recites, in part, wherein the sync code includes one pattern breaking the maximum run and other patterns aligned before and after the one pattern, the length of the

other patterns being based upon a value obtained by dividing the outermost circumference radius of the disc-type recording medium by the innermost circumference radius.

Kahlman does not disclose all the elements of claim 1 as currently amended. For example, Kahlman does not disclose that the length of the other patterns are based upon a value obtained by dividing the outermost circumference radius by innermost circumference radius. The 3-bit code words disclosed by Kahlman are fixed at 3 bits. The code words will be 3 bits no matter what the ratio of outermost circumference to innermost circumference is. Nowhere does Kahlman disclose that the length of the 3-bit code words is based upon the ratio of outermost circumference to innermost circumference. Therefore, Kahlman does not disclose all elements of claim 1.

For similar reasons, it is respectfully submitted that Kahlman does not disclose all the limitations of claims 9, 19, 25, 30, and 33.

Claims 2, 3, 5, 10, 11, 13-16, 19-21, 24-27, and 29-35 are deemed patentable due at least to their depending on one of claims 1, 9, 19, 25, 30, or 33.

As to claim 36, claim 36 recites wherein the sync code is generated in consideration of a ratio of the innermost circumference radius and the outermost circumference radius. Kahlman does not disclose that the sync code is generated in consideration of the ratio. Nowhere does Kahlman disclose a ratio. At best, Kahlman discloses taking into account the data in which the sync code is to be inserted (col. 14, lines 25-32,) not taking into consideration the ratio of circumferences. Accordingly, Kahlman does not disclose all elements of claim 36.

For similar reasons, it is respectfully submitted that Kahlman does not disclose all the limitations of claim 38.

Claims 37 and 39 are deemed patentable due at least to their depending on claim 36 and 38, respectively.

**REJECTIONS UNDER 35 U.S.C. §103:**

Claims 4, 8, 12, 22 and 28 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kahlman et al. (U.S. Patent 6,496,541) in view of Kojima et al. (U.S. Patent 5,987,066).

Based on the foregoing, this rejection is respectfully requested to be withdrawn. Claims 4, 8, 12, 22, and 28 are deemed patentable due at least to their depending on one of claims 1, 9, 19, or 25.

**CONCLUSION:**

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 503333.

Respectfully submitted,

STEIN, MCEWEN & BUI, LLP

Date: \_\_\_\_\_

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